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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,007	11/29/2001	Ulrich Bley	DNAG 222 - PFF/JRC	5982
24972	7590	04/05/2004	EXAMINER	
FULBRIGHT & JAWORSKI, LLP			FELTON, AILEEN BAKER	
666 FIFTH AVE			ART UNIT	
NEW YORK, NY 10103-3198			PAPER NUMBER	

3641

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/030,007	Applicant(s) BLEY ET AL.	
	Examiner Aileen B Felton	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-19, 24 and 25 is/are pending in the application.
 4a) Of the above claim(s) 24 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the particular gas generating composition, does not reasonably provide enablement for any gas generating composition that comprises a binding agent. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The specification is enabled only for the specific gas generating composition. Applicant's claims however require only one ingredient (i.e. a binding agent with 0 % oxidizing agent and 0 % fuel) and read on any gas generating composition that merely has a binding agent. Clearly it is not the case that any gas generating composition with only a binding agent source would achieve the claimed combustion vapors being free of nitrogen oxide and deficient in carbon monoxide. One of ordinary skill in the art would not be able to determine what compositions would meet this limitation without undue experimentation.
4. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The specific fuel and oxidizer are critical or essential to

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the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Applicant's claims require that a specific combustion vapors being free of nitrogen oxide and deficient in carbon monoxide is achieved but only requires one ingredient (i.e. a binding agent). Since these ingredients are essential to achieving the claimed combustion vapors being free of nitrogen oxide and deficient in carbon monoxide they must be included in the claims. One of ordinary skill in the art would not be able to determine what compositions would meet this limitation without undue experimentation.

5. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the specific fuel and oxidizer. Since these ingredients are essential to achieving the claimed combustion vapors being free of nitrogen oxide and deficient in carbon monoxide they must be included in the claims. One of ordinary skill in the art would not be able to determine what compositions would meet this limitation without undue experimentation.

Election/Restrictions

6. Claims 24 and 25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6/2/2003.

Claim Rejections - 35 USC § 102

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Wehrli(4,997,496).

Wehrli discloses a composition that comprises ascorbic acid, potassium nitrate, and a corn starch. The combustion vapor contents that are free of nitrogen oxide and deficient in carbon monoxide are inherent properties of the composition of Wehrli.

Where a product appears to be the same or only slightly different, the properties recited appear to be inherent. The Office does not have testing facilities to determine such.

The burden falls on applicant to show that the prior art products do not necessarily or inherently possess the claimed properties. In re Thorpe, 777 F.2d 695, 697; 227 USPQ 964, 966; In re Fitzgerald, 619 F.2d 67, 70; 205 USPQ 594, 596; In re Best, 562 F.2d 1252, 1255; 195 USPQ 430, 433-434; In re Brown, 459 F.2d 531; 173 USPQ 685.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 11-14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton et al(4,214,438).

Hamilton et al discloses a composition for use in an air bag device that comprises 5-95 % of an organic fuel and 5-95 % of an oxidizer. The fuel can be cellulose acetate which also functions as a binder. The oxidizer can be potassium perchlorate. Modifiers can be added to the composition such as aluminum oxide as a viscosity modifier and graphite fibers as burn rate modifier.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the amount and ingredients as suggested by Hamilton to optimize the performance and reduce or eliminate poisonous combustion vapors. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

11. Claims 11-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cioffe(5,633,476).

Cioffe discloses a composition that comprises .5-15 % of potassium perchlorate, 30-50 % of an organic acid with the general formula $C_6H_8O_6$ such as ascorbic acid, a binder such as cellulose acetate, and graphite as a coating.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the amount of the binder since Cioffe suggests that varying the proportions of the ingredients to control the properties and explosive characteristics of the composition. It would also have been obvious to one having ordinary skill in the

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art at the time the invention was made to vary the amount and ingredients as suggested by Cioffe to optimize the performance and reduce or eliminate poisonous combustion vapors. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

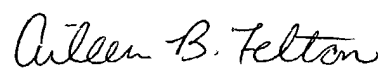
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aileen Felton whose telephone number is (703) 306-5751. The examiner can normally be reached on Monday through Friday from 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198.

The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687. The fax number for submissions before a final action is (703) 872-9326, for after final submissions is (703) 872-9327, and customer service is (703) 872-9325.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



Aileen B. Felton